



**A case study of a Green Flag-certified
preschool in Sweden**

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Abstract

This paper presents findings from a case study intended to develop understanding of the practices within education for sustainable development at a preschool in Sweden and highlights its work with two themes: *The Health of People and the Planet* and *Human and Animal Societies*. This case study was part of a large school development project conducted by a university in collaboration with a municipality between 2017 and 2019. The preschool had two units with a total of 36 children aged 1–6 years, and 8 preschool teachers. Empirical materials were collected from observations of educational activities at two events, as well as group discussions with teachers and the preschool head teacher. Findings show that the interconnectedness of, and interdependencies between, the environmental, social, and, to some extent, economic aspects of sustainable development were present in educational practices of the preschool. They also indicate that young children, with support and encouragement from their teachers, can take responsibility for activities that are meaningful to them. In this preschool, children's opinions were respected, and they were given the opportunity to participate in decision-making activities of relevance to their lives.

Keywords: early childhood education, eco-certified, sustainable development, transformative learning, whole-school approach

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Introduction

Although the United Nations (UN, 2015, p. 17) 2030 Agenda for Sustainable Development emphasizes the importance of quality education and lifelong learning for all children, knowledge and understanding as to how to ensure quality in early childhood education for sustainable development (ESD) remain limited. For young children to become active global citizens, ESD has been identified as a significant tool in the achievement of sustainable development goals (SDGs; UN, 2015). A main ESD starting point in early childhood education is both to view children as active agents and stakeholders for the future and to ensure their involvement (Barratt Hacking, Barratt, & Scott, 2007; Davis, 2008, 2015; Pramling Samuelsson, 2011). With regard to integrating sustainable development into early childhood education, the new Swedish preschool curriculum Lpfö18 explicitly states that “*Education should give children the opportunity to acquire an ecological and caring approach to their surrounding environment and to nature and society*” (Skolverket, 2018a, p. 10).

The new curriculum supports a holistic approach that addresses the environmental, social, and economic dimensions of sustainability (Borg & Pramling Samuelsson, 2019). The environmental dimension focuses on issues related to climate change, disaster prevention, and natural resources; the social dimension emphasizes human rights, gender equity, health, and cultural diversity; and the economic dimension addresses poverty reduction, consumption, market economy, corporate responsibility, and and accountability (UNESCO, 2005). According to the curriculum, it is the task of preschool to lay the foundation for lifelong learning for all children. In cooperation with the child’s home, the preschool should help children to become active and responsible members of society (Skolverket, 2018a).

The European Union (EU) recommends that educational institutions at all levels should strive to be sustainable organizations by integrating the principles of sustainable development into policy and practice (EU, 2010). In a school context, the EU (2010, p. 5) proposes “*the active participation of all stakeholders: school leaders, teachers, pupils, the school board, administrative and supportive staff, parents, NGOs, the local community and business.*” ESD has become increasingly significant for educators throughout the world, particularly since the adoption of the 17 SDGs (UN, 2015), in which quality education was identified as being significant for the achievement of other SDGs.

Although Sweden is considered to be a leading country when it comes to integrating ESD into policy documents and implementing policy, there is a lack of research in the field of early childhood ESD (Breiting & Wickenberg, 2010; Persson, 2008). With its purpose to advance this field, this paper presents findings from a case study intended to develop understanding about the educational practices of ESD at a preschool in Sweden.

This paper highlights the preschool's work with two themes: *The Health of People and the Planet* and *Human and Animal Societies*. The following research questions were explored:

- Does the preschool integrate environmental, social and economic dimensions of sustainable development into its educational practices? If so, how?
- How do preschool teachers ensure the active participation of all stakeholders: for example, children, parents, and local communities?

In this article, teacher refers to both certified teachers and childminders. Furthermore, the terms sustainable development and sustainability are used synonymously throughout.

At a glance: Eco-certified preschool

In Sweden, preschool refers to a public or private educational institution for children who have not yet started their formal schooling. Regardless of family income or background, all children can attend preschool from the age of 1 year; from the fall of the year, they turn 3, they are entitled to 3 hr of free preschool education a day (Skolverket, 2018b). These children are usually between 1 and 5 years old. According to Statistics Sweden (Statistiska centralbyrån), in 2018, approximately 518,000 children were enrolled in 9,800 preschools, 72% of which were run by the municipality (Skolverket, 2018b). However, there are also preschools that are run by companies, parent cooperatives, and non-profit organizations. Regardless of owner, the education services are made available by the municipalities, which allocate funding to all preschools within their local community (Ärlemalm-Hagsér & Engdahl, 2015). From the age of 6 years, all children must attend compulsory preschool class. A preschool class is a separate type of school that is free of charge. The intention with the preschool class is that it serves as a transition between preschool and primary school. All municipalities are responsible for providing 3 hr of preschool education for children (Skolverket, 2019b).

The first national curriculum for preschool came into force in 1998, when preschool became part of the Swedish education system under the Swedish National Agency for Education. Environmental education, which includes gardening, outdoor play, going out in the forest, etc., has always been an integral part of preschool education in Sweden (Hallmén, 2011). For the first time, the new preschool curriculum (Lpfö 18) explicitly includes sustainable development in its text (Skolverket, 2018a). This means that preschools are now required to integrate ESD into their educational practices.

Preschools in Sweden can be awarded two different types of eco-certification: one is "Green Flag" by the Keep Sweden Tidy (Håll Sverige Rent, 2019a), that is a part of the eco-preschool programs of the Foundation for Environmental Education; the other is

“Preschool for Sustainable Development” certification (Skolverket, 2019a), which is awarded by the Swedish National Agency for Education. Approximately, 1,500 preschools in Sweden are “Green Flag”-certified (Håll Sverige Rent, 2019a), and 215 preschools have a “Preschool for Sustainable Development” certificate (Skolverket, 2019a). The eco-certified preschools’ activities are adapted to the Swedish school system, and their educational programs are often based on a whole-school approach to ESD (Henderson & Tilbury, 2004; Posch, 1999). A whole-school approach to ESD is when “*an educational institution includes sustainability principles in every aspect of school life. This includes teaching content and methodology, school governance and cooperation with partners and the broader communities as well as campus and facility management*” (UNESCO, 2017, p. 2). There is a great need for research on the implementation of ESD in preschools, which is the focus of this paper.

Background of the Study

This case study was part of a preschool development project aimed at developing preschool teachers’ professional competence in ESD. It also aimed to investigate the impact of the project on teachers’ knowledge, attitudes, and practices concerning ESD. The project was developed in collaboration with a preschool head teacher, two preschool teachers, and two leaders who work with education department in a municipality in Sweden. In 2017, a baseline survey was conducted among preschool teachers in the municipality to explore their needs and their expectations from the project. The findings revealed that 66% of the preschool teachers did not have any education or training in ESD. In 2017–2019, three professional development workshops on ESD were held by researchers as part of this project. About 150 teachers from 18 preschools took part in each workshop. The workshops took up the following:

- Introduction to sustainable development and ESD.
- The holistic approach to ESD addressing the environmental, social, and economic dimensions.
- The rationale for ESD in early childhood education.
- Introduction to the global goals and Agenda 2030 for Sustainable Development (UN, 2015).
- National policy documents with a focus on the new curriculum for preschool Lpfö 2018.
- The process of working with ESD with young children.

An ESD network was established by preschool teachers in the municipality, where they discuss teaching issues, and progress and challenges related to ESD, and where they provide each other with practical tips. The researcher (author of this article) was present at two ESD network meetings.

Conceptualization of ESD in Preschool Education

The global sustainable development agenda emphasizes the need for education that incorporates new knowledge to deal with such complexities and uncertainties as poverty, gender inequality, climate change, natural disaster, and inequalities within and between individuals and countries (UN, 2015). Raising awareness about the critical condition of the planet is not enough to change the behavior of the individual or his/her values; rather, there is a need for alternative forms of education and learning that result in action competent individuals (Mogensen & Schnack, 2010; Wals & Corcoran, 2012). The suggestion is that ESD is an effective teaching approach that takes different perspectives, views, and values into account (Öhman, 2008), since ESD supports transformative learning that leads to changes in the surrounding world (Blake, Sterling, & Goodson, 2013).

The findings from studies in whole-school approaches indicate positive outcomes in relation to children's learning for ESD and improved educational practices at preschools (Chan, Choy, & Lee, 2009; Davis, 2005; Lewis, Mansfield, & Baudians, 2010; Mackey, 2012). A whole-school (institutional) approach to ESD deals with the integration of sustainable development in daily educational practices throughout curriculum in a holistic manner, which includes all levels and parts of school organization instead of teaching sustainable development as an isolated topic (Hargreaves, 2008; Henderson & Tilbury, 2004).

Studies have shown that teachers play significant roles in the development of young children's verbal and practical knowledge about sustainable development issues by involving them in different activities, such as interactive plays, conversations, discussions, and outdoor and indoor activities (Borg, 2017a; Davis, 2005; Lewis et al., 2010; Mackey, 2012). Yet, there is little ESD material and few inspiring examples of ESD in practice at the preschool level in particular (Borg, Gericke, Höglund, & Bergman, 2012; Hedefalk, Almqvist, & Östman, 2015).

According to Bruner (1960), the social environment and social interactions are important when it comes to children's learning. Bruner (1966) argues that the involvement of adults – for example, teachers – and knowledgeable peers plays an important role in children's learning because they can make a great difference in the learning process by making the information appropriate to each child's current level of understanding. He further states

that children are active participants in learning and that they are capable of learning many complex issues, if the instructions are organized appropriately (Bruner, 1960). Since it is preschool teachers who face the challenge of integrating all complex aspects of ESD into daily educational activities, they need to understand *what* they are communicating, *how* to go about it, and crucially *why* they are doing so in the first place (Vare & Scott, 2007).

In preschool education practices of ESD, “The Seven RE-Words” (the 7Rs) are used. The 7Rs framework was originally introduced by the Brundtland Commission in *Our Common Future* (1987); it was then further developed by the World Organization for Early Childhood Education World Assembly (OMEPE; Engdahl & Rabušicová, 2011) with the intention of supporting ESD practices at the preschool level (Table 1).

These 7Rs together represent three dimensions of sustainable: for example, *Respect*, *Reflect*, and *Rethink* refer to the social dimension; *Reuse* and *Reduce* relate to the environmental dimension; and *Recycle* and *Redistribute* highlight the economic dimension (OMEPE, 2011). They describe specific approaches that children can adopt in their local environments and that tie closely with the global values of respect, equity, and diversity (UNESCO, 2012).

A Case Study of a Green Flag Preschool

This case study was conducted between 2017 and 2019 at a preschool that was part of the preschool development project described above (see section “Background of the Study”) by a researcher (the author) at a university in Sweden. Since 2009, this particular preschool has met the requirements for Green Flag certification. Its journey with ESD began with a passionate and committed preschool teacher (Marit), who has always been

Table 1. The 7Rs are described in relation to concentric circles where society and the economy are shown to be embedded in the wider environmental circle

Concentric circles of sustainable development	The seven RE-Words (The 7Rs)	Description of 7Rs
	Reduce	Doing more with less
	Reuse	Making use of old thing
	Recycle	Someone else can use it again
	Redistribute	Using resources more equally
	Respect	Showing respect for the rights of children
	Rethink	Valuing other things
	Reflect	Mentioning cultural differences in the world

Note. This model depicts the need for setting boundaries for a sustainable society and economy within environmental limits (Elliott, 2013). Source of 7Rs: OMEPE project about ESD.

interested in integrating sustainable development issues into daily preschool educational activities. Her ESD work with young children inspired other colleagues and gradually they themselves became active with ESD. At present, the entire preschool is actively engaged in the Green Flag program, and the preschool has received several awards from its municipality for the quality of its education activities.

A Green Flag-certified preschool usually works with different themes published on the homepage of the Keep Sweden Tidy Foundation (<https://www.hsr.se/exempelsamling/sok-exempel-forskolan>). Green Flag certification is a quality assurance of ESD work. The criteria for certification are as follows: linking to the global SDGs, implementing different educational methods, working in a democratic manner, ensuring the involvement of children, and making the work visible outside the preschool (Håll Sverige Rent, 2019b).

In the beginning of the school development project, the preschool teachers attended 3 days of educational workshops to learn about sustainable development, ESD, Agenda 2030 for Sustainable Development, the 17 SDGs, and pertinent policy documents in Sweden (including the new preschool curriculum). In addition to these workshops, two group discussions about the holistic approach to ESD were held by the researcher at the studied preschool. All teachers and the preschool head teacher attended both group discussions.

Data collection and analysis

The preschool in this study had two units with a total of 36 children aged 1–6 years, and 8 preschool teachers, 2 of whom were childminders. One unit was for younger children ($n = 22$) aged 1–3 years, and the other was for older children ($n = 14$) aged 4–6 years.

This case study was carried out “with” and “for” the teachers rather than being “about” and “on” the teachers (Heron & Reason, 2001). The reason for this was to explore real activities at the preschool (Cohen, Manion, & Morrison, 2011). The researcher did not plan or propose any activities; rather, she observed things as they happened and then had informal conversations with the teachers, so as to understand their perspectives, views, and justifications. The empirical material was generated through observations of teachers’ ESD work with children; group discussions with teachers, and the preschool head teacher; two ESD network meetings with teachers (December 18, 2017 and October 15, 2018); attendance at two events (Earth Hour on March 24, 2018 and a vernissage of children’s work on May 22, 2019); reading the preschool’s Green Flag reports; and attendance at the preschool’s planning meetings.

The researcher read the empirical materials, which included notes from observations of preschool teachers’ ESD work, as well as notes from meetings and group discussions,

more than once to ensure familiarization with the data. “The Seven RE-Words” (the 7Rs) were used while coding and analyzing data. To understand ESD practices in this preschool, we used relevant policy documents, findings from empirical studies, and the 7Rs to discuss the findings (see section “Conceptualization of ESD in Preschool Education”).

Ethics

The preschool voluntarily consented to participate in this study when it agreed to be part of the school development project. This study followed the codes and regulations of “Good Research Practice” (Vetenskapsrådet, 2017) concerning the informed consent of participants, confidentiality, and use of information for the study.

To inform the guardians of the children about the presence of a researcher in the preschool, an information letter with a photo of the researcher was posted on the notice board at the preschool. It was believed that in this way, the guardians would be aware of the project and be able to identify the researcher when she was at the preschool.

The study procedures were carried out in accordance with the Declaration of Helsinki. Since it is a school development and research project, all preschools and teachers consented their participation in the study in the beginning of the project. The teachers were informed that their participation in this case study was completely voluntary and that all research data about them, the preschool, and the participating municipality would be handled confidentially. They could discontinue or withdraw from the study at any time without providing a reason. Moreover, they were informed that data collected for this study would be used only for research purposes, conferences, teaching programs, and scientific publications. The study did not include any sensitive information about the participants.

The study did not collect any sensitive information or personal details about the participants. The study was registered under the General Data Protection Regulation at the university where the author is employed. All names were removed from the list of participants after data were analyzed and the final project report had been prepared. Fictive names are used to anonymize the identity of all participants.

Findings of the Case Study

The preschool in this study works with different themes for a certain length of time: for example, 6–12 months. The teachers integrate ESD into their planning, in which they seem to engage children and prioritize their choices.

In the following, the findings of this study are presented under two themes. The data for *Theme 1* were collected from observations of the preschool’s educational activities and the

event Earth Hour, informal discussions, and group discussions with preschool teachers; the data for *Theme 2* were collected from conversations with preschool teachers and observation of the vernissage of children's work. To anonymize the illustrations, the names of children and places have been deleted.

Theme 1: The health of people and the planet

In 2017 and 2018, the preschool teachers focused on the theme "*The Health of People and the Planet*" for which they combined three Green Flag themes: Lifestyle and Health, Litter and Waste, and Climate and Energy instead of working with each theme separately. With guidance and support from the teachers, the children actively participated in selecting content and planning different activities. Although the issues related to environmental and social dimensions of sustainability were obvious for all teachers in that preschool, the economic dimensions were found challenging by the teachers.

The teachers were instrumental in encouraging children's participation by facilitating their involvement in activities using songs, stories, dramas, plays, films, illustrations, drawings, and experiments. They also helped children to take part in informal talks in groups. For example, one teacher (Anna, preschool teacher) read a book that was about the importance of friendship. The story was used to initiate a conversation with the children about how to be a good friend, about different animals and their lives, and about how to take care of the environment. A brief description of the activities with some of the children's illustrations is presented below.

People's health. The teachers initiated activities by asking the children, "*What do our bodies need to be healthy?*" (Figure 1). The children answered, "*Our bodies need food,*" "*We have to play ice-hockey,*" "*We need clean air and oxygen,*" "*We should drink lemonade and water,*"



Figure 1. What do our bodies need to be healthy?

“We must play,” “People should spend time in nature,” and “Walking is good exercise.” Some of the children responded that “We must run and jump.” Gradually, the conversation led to a drawing activity. The children worked with their friends in small groups and drew pictures of different activities and food items that they identified as being healthy. According to some of the children, “We need to eat nutritious food, such as carrots, cucumbers, tomatoes, salad, meat, bell peppers and apples. We have to drink a lot of water. We need to play and be active.” The children also felt that having a house or a tent is important for good health.

The health of planet Earth. The teachers showed an illustration of a group of children beside a large globe (see Figures 1 and 2) and asked the preschool children what the children in the illustration were doing and why. The preschool children responded that the earth is dirty, so the children are cleaning it.

The teachers then connected the health of human beings with the health of the planet by asking, “What does the earth need to be healthy? How can we help the earth?” The children pondered this, and then drew their thoughts and ideas on paper. The teachers wrote down the verbal responses of the children in their drawings (see examples in Figures 2 and 3).

According to the children, “We need trees to keep the earth healthy. We should take care of trees because they clean the air. The earth wants clean air.” Other responses were: “The earth wants to be clean. We can help the earth be clean by picking up litter,” “We can ride cycle instead of taking cars to reduce pollution,” “We should not waste water. We must turn off the tap and switch off lights when we go out to save energy.” Some children wanted to help the earth by “buying food that is grown in Sweden and in local places” (the name of the municipality is deleted in the illustration for the sake of anonymity) and by “recycling.”



Figure 2. What does the earth need to be healthy?



Figure 3. How can we help the earth?



Figure 4. Handmade toy cars

The children made toy cars out of empty milk packets, egg packets, plastic lids, and old paper, and then colored their handmade toy cars with pens (see Figure 4). In most cases, the children talked about what they could do to help the earth be healthy, and they also wanted to take responsibility as a step toward making the earth a better place to live.

Theme 2: Human and animal societies

In 2018–2019, teachers and those children in their final year at preschool decided to host an evening vernissage of their work at the preschool. The theme of the vernissage was *Human and Animal Societies*, which was inspired by the two Green Flag themes:

“City/Town and Society” and “Animals and Nature.” Under this theme, the teachers integrated the environmental, social, and economic dimensions in a clear and organized way. Constantly, they connected the themes with relevant SDGs of the Agenda 2030 for Sustainable Development: for example, Good Health and Well-Being (goal 3), Sustainable Cities and Communities (goal 11), and Climate Action (goal 13) (UN, 2015).

The children’s parents, the preschool head teacher, local politicians, friends, and others were invited to attend the vernissage of the children’s work. The past-year preschool children hosted the vernissage themselves, and the teachers supported them in the background. One teacher (Anna) explained that *“We have worked many hours together with the children on this vernissage. The children are so excited.”*

The guests were welcomed by the children, who took turns showing the guests the town they had constructed, their handmade toys, paper dolls, and illustrations. They gave explanations and answered guests’ questions.

One preschool teacher (Marit) explained how the work began with some questions: for example, *“Where do I live? What does our town or village have? What do I have in my community?”* She described how the children drew the communities where they and their families lived. They were very happy and proud of their families, homes, friends, and town or village (see Figure 5). Marit continued:

The children were aware of the facilities they have in their community – for instance, the supermarket where they buy food, healthcare centres, hospitals, fire brigade, police station, bus stop, train station, preschool, school, etc. They worked individually as well as in groups. (Marit, preschool teacher)



Figure 5. What does our town have?



Figure 6. Norms and values in humans' society



Figure 7. Animal society

One preschool teacher (Ulla) explained the importance of democracy in any society, stating how at the preschool they work a lot with democracy, as well as norms and values (see Figure 6), which have always been an integral part of the Swedish preschool curriculum. The preschool teacher (Ulla) continued to say that not only they worked with democracy with the children, but that they also made sure that children's voices were heard and their opinions respected.

One preschool teacher (Anna) described how "We connected human society with the society of animals." The children stuck pictures of different wild animals onto a piece of paper (see Figure 7). They watched short films of animals – their lives and their societies. They learned the names of different animals, and they learned about their lifestyles and

food chains. The importance of forests and of taking care of the environment were also included in the work.

The teachers explained how they included the economic dimension of sustainable development by incorporating issues related to the consumption of resources, such as water, electricity, and fuel. Together with the children, the teachers reflected on how people can *reduce* their consumption of energy and resources by switching off the lights when they go out, using less water while showering, and reusing and *recycling* goods. To reduce consumption and to learn to *reuse* materials, the children constructed their town and communities using old milk cartons, plastic lids, egg boxes, shoe boxes, paper, thread, and pieces of wood that they had found in the forest. They also used such material to make innovative toys, which they found fun to play with. One teacher explained that:

We play with the different toys that the children made themselves, for examples, cars, buses, trains, bicycles. They (the children) come to us to show us the toys they have made. We talk about the environmental impact of using different types of transport.
(Anna, preschool teacher)

In a group discussion, the teachers explained that at this particular preschool, teachers always ask children what they would like to do. The children decide something that they like and then the teachers plan the activities together. They explained that “*We respect children’s opinions and listen to their ideas.*” The teachers watch YouTube films, read books, go out into nature, and do experimental work. One teacher (Marit) stated that “*We have a Green Flag Advisory Board that is led by children. It helps children to be responsible and to build self-esteem.*”

Discussion

In this paper, we discuss the findings of this case study in relation to the 7Rs framework, holistic approaches to ESD, as well as related literature, while addressing the extent to which the preschool teachers adapted their teaching practices to accommodate these aspects.

Implementation of ESD: The interconnectedness of humans and nature

The findings indicate that, to a great extent, the teachers connected the environmental, social, and economic dimensions of sustainability in their work using the themes “*The Health of People and the Planet*” and “*Human and animal societies*” to show the interconnected systems of humans and nature. As with previous studies (Ärlemalm-Hagsér, 2013; Davis, 2008), this case study demonstrates that the economic dimension was difficult for teachers to implement in their teaching. In this study, teachers related the economic aspects to *reduce* (mainly in terms of reducing water and electricity

consumption), and to *recycle* and *reuse* (mainly in terms of recycling and reusing plastic, paper, and natural resources).

The Swedish curriculum for preschool emphasizes that “*Children should also be given the opportunity to develop knowledge about how the different choices that people make can contribute to sustainable development – not only economic, but also social and environmental*” (Skolverket, 2018a, p. 10). As children are the bearers of norms and values that shape future societies (Eagly & Chaiken, 1993; Hofstede, Hofstede, & Minkov, 2010), it is important that they are aware of their surrounding society.

Studies on young children’s understanding of economy and society have shown that by the age of 6 years, they have started to develop an awareness about social and economic issues (Barrett & Short, 1992; Borg, 2017b). Therefore, preschool can be an important place to begin addressing simple economic issues that children deal with in their daily lives (Borg, 2017b, 2017c).

Implementation of ESD: Content and methods

With support from teachers, the children were actively involved in planning the content (learning object) and the process of observing the Earth Hour and hosting the Vernissage. Through their active participation, the children showed a sense of responsibility. This was not completely unexpected, as it has been reported that:

When young children are involved in making decisions that affect their lives, including those decisions regarding sustainability and the natural environment, they are capable of contributing to the decision-making that leads them to purposeful action. (Mackey, 2012)

Similarly, Davis (2008, p. 7) argues that young children are able to critically respond to sustainability issues and that they “*can be proactive participants in educational and environmental decision-making – as initiators, provocateurs, researchers and environmental activists.*”

In this study, the preschool teachers used various teaching methods to teach sustainability such as playful interactions, informal conversations between teacher and children, drawing and painting, watching short YouTube films, reading children’s books, acting out scenes, discussing in pairs and in groups, and having outdoor and indoor activities. According to Pramling Samuelsson (2011), ESD can be both “*content (the object of learning) and a way of working with children (the act of learning) in the early years.*” By combining different themes with various teaching methods, the preschool teachers in this study seemed to create lively and new dimensions in their work. This is consistent with what Pramling Samuelsson and Johansson (2006, p. 63) argue for – that is to say, that

teachers need to have respect for children's world of play to make the preschool a place for meaningful and joyful learning.

Implementation of ESD: Transformative learning

Researchers (Davis, 2008; Singer-Brodowski, Brock, Etzkorn, & Otte, 2019) have stated that implementing ESD in preschool education is not easy because it requires a great level of collaboration within the entire school if it as an organization is to have a culture of sustainability. There is still a long way to go when it comes to the implementation of ESD in preschool education; however, steps have been taken. Consistent with Jackson's (2007) and Davis's (2008) findings, this study found that integrating sustainability within a preschool can result from an individual teacher's passion for sustainability. This was the case with the preschool in this study, where over time other teachers became both inspired and involved in ESD activities. The teachers mentioned that after they attended the competence development training/workshops, they learned more about the three dimensions of sustainable development and the global SDGs, which helped them to see how their work relates to them.

There were many people involved in the vernissage: not only the children and the teachers, but also parents, politicians, friends, and colleagues. This was to make visible the preschool activities to outside society, which is a transformative approach. This type of innovative event may be used as an example for other preschools.

The findings of this study also indicate that the environmental, social and, to some extent, economic aspects of sustainable development were interconnected and interdependent in educational activities of the preschool. Young children, with support and encouragement from their teachers, can take responsibility for activities that are meaningful to them. In this preschool, children's opinions were respected, and they were afforded the opportunity to participate in decision-making activities that related to their lives.

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FB, PhD, is an Assistant Professor in Educational Work and is also the Head of Early Childhood Education Collegium at Dalarna University in Sweden. At present, she is leading a nationwide study project titled “Eco-certified Preschools and Children’s Learning for Sustainability: Researching Holistic Outcomes of Preschool Education for Sustainability” (HOPES; 2019–2022), funded by the Swedish Research Council. She has also been leading a school development and research project (2017–2019) that focuses on improving preschool teachers’ competence in ESD.

This is a single-authored paper written based on a case study conducted by the author herself. All data were collected and analyzed by the author.

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